

SEQUENCE LISTING

<110> Misra and Kay

<120> Transgenic Plants that are Resistant to a Broad Spectrum  
of Pathogens

<130> 60993

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<150> 60/125,072

<151> 1999-03-17

<150> PCT/CA00/00288

<151> 2000-03-16

<160> 41

<170> PatentIn Ver. 2.0

<210> 1

<211> 443

<212> DNA

<213> Phyllomedusa bicolor

<220>

<221> CDS

<222> (58)..(294)

<400> 1

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Met Asp Ile Leu Lys Lys Ser Leu Phe Leu Val Leu Phe Leu Gly Leu
  1             5             10             15

gtt tcc ctt tcc atc tgt gaa gaa gag aaa aga gaa aat gaa gat gag      153
Val Ser Leu Ser Ile Cys Glu Glu Glu Lys Arg Glu Asn Glu Asp Glu
          20             25             30

gag aaa caa gat gac gag caa agt gaa atg aag aga gct atg tgg aaa      201
Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys
          35             40             45

gat gtg tta aaa aaa ata gga aca gtg gcc tta cat gca gga aaa gcg      249
Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala
          50             55             60

gct tta ggt gca gtt gct gat aca ata agt caa gga gag caa taa      294
Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln
          65             70             75

agtgaaaaaa atttaaaatt gaattactct aaatagaaca attagcaata attgtgtcaa 354
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 <213> Phyllomedusa bicolor

<400> 2  
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 Val Ser Leu Ser Ile Cys Glu Glu Glu Lys Arg Glu Asn Glu Asp Glu  
 20 25 30  
 Glu Lys Gln Asp Asp Glu Gln Ser Glu Met Lys Arg Ala Met Trp Lys  
 35 40 45  
 Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala  
 50 55 60  
 Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln Gly Glu Gln  
 65 70 75

<210> 3  
 <211> 27  
 <212> PRT  
 <213> Phyllomedusa bicolor

<400> 3  
 Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His Ala Gly Lys Ala  
 1 5 10 15  
 Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln  
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<210> 4  
 <211> 31  
 <212> PRT  
 <213> Phyllomedusa bicolor

<400> 4  
 Ala Met Trp Lys Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu His  
 1 5 10 15  
 Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln  
 20 25 30

<210> 5  
 <211> 36  
 <212> PRT  
 <213> Pachymedusa dacnicolor

<400> 5  
 Gly Met Trp Ser Lys Ile Lys Asn Ala Gly Lys Ala Ala Ala Lys Ala  
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                     20                    25                    30  
 Leu Gly Glu Gln  
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<210> 6  
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 <212> PRT  
 <213> Pachymedusa dactylophora

<400> 6  
 Ala Leu Trp Lys Thr Leu Leu Lys Lys Val Gly Lys Val Ala Gly Lys  
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                     20                    25                    30

<210> 7  
 <211> 35  
 <212> PRT  
 <213> Agalychnis annae

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                     20                    25                    30  
 Gly Glu Gln  
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<210> 8  
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<400> 8  
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<210> 9  
 <211> 30  
 <212> PRT

<213> Agalychnis annae

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Ser Leu Trp Ser Lys Ile Lys Glu Met Ala Ala Thr Ala Gly Lys Ala  
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Ala Leu Asn Ala Val Thr Gly Met Val Asn Gln Gly Glu Gln  
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<210> 10

<211> 34

<212> PRT

<213> Phyllomedusa sauvagei

<400> 10

Ala Leu Trp Lys Thr Met Leu Lys Lys Leu Gly Thr Met Ala Leu His  
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Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asp Thr Ile Ser Gln Gly  
20 25 30

Thr Gln

<210> 11

<211> 34

<212> PRT

<213> Phyllomedusa sauvagei

<400> 11

Ala Leu Trp Phe Thr Met Leu Lys Lys Leu Gly Thr Met Ala Leu His  
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Ala Gly Lys Ala Ala Leu Gly Ala Ala Ala Asn Thr Ile Ser Gln Gly  
20 25 30

Thr Gln

<210> 12

<211> 30

<212> PRT

<213> Phyllomedusa sauvagei

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Ala Leu Trp Lys Asn Met Leu Lys Gly Ile Gly Lys Leu Ala Gly Lys  
1 5 10 15

Ala Ala Leu Gly Ala Val Lys Lys Leu Val Gly Ala Glu Ser  
20 25 30

<210> 13

<211> 27

<212> PRT  
 <213> Phyllomedusa sauvagei

<400> 13  
 Ala Leu Trp Met Thr Leu Leu Lys Lys Val Leu Lys Ala Ala Ala Lys  
 1 5 10 15  
 Ala Leu Asn Ala Val Leu Val Gly Ala Asn Ala  
 20 25

<210> 14  
 <211> 29  
 <212> PRT  
 <213> Phyllomedusa sauvagei

<400> 14  
 Gly Leu Trp Ser Lys Ile Lys Thr Ala Gly Lys Ser Val Ala Lys Ala  
 1 5 10 15  
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<210> 15  
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 <213> Rana temporaria

<220>  
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 <222> (53)..(238)

<400> 15  
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acc ttg aag aaa tcc ctc tta ctc ctt ttc ttc ctt ggg acc atc aac 106  
 Thr Leu Lys Lys Ser Leu Leu Leu Phe Phe Leu Gly Thr Ile Asn  
 5 10 15

tta tct ctc tgt gag gaa gag aga gat gcc gat gaa gaa aga aga gat 154  
 Leu Ser Leu Cys Glu Glu Glu Arg Asp Ala Asp Glu Glu Arg Arg Asp  
 20 25 30

gat ctc gaa gaa agg gat gtt gaa gtg gaa aag cga ttt ttt cca gtg 202  
 Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe Pro Val  
 35 40 45 50

att gga agg ata ctc aat ggt att ttg gga aaa taa ccaaaaaaag 248  
 Ile Gly Arg Ile Leu Asn Gly Ile Leu Gly Lys  
 55 60

ttaaaacttt ggaaatggaa ttggaaatca tctaattgtgg aatgtcattt agctaaatgc 308

acatcaaag tcttataaaa a 329

<210> 16  
<211> 61  
<212> PRT  
<213> Rana temporaria

<400> 16  
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20 25 30  
Arg Asp Asp Leu Glu Glu Arg Asp Val Glu Val Glu Lys Arg Phe Phe  
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50 55 60

<210> 17  
<211> 13  
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<213> Rana temporaria

<400> 17  
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<210> 18  
<211> 13  
<212> PRT  
<213> Rana temporaria

<400> 18  
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1 5 10

<210> 19  
<211> 13  
<212> PRT  
<213> Rana temporaria

<400> 19  
Leu Leu Pro Ile Val Gly Asn Leu Leu Lys Ser Leu Leu  
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<210> 20  
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<400> 20

Leu Leu Pro Ile Leu Gly Asn Leu Leu Asn Gly Leu Leu  
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<210> 21  
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<400> 21  
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<210> 22  
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<400> 22  
Val Leu Pro Ile Ile Gly Asn Leu Leu Asn Ser Leu Leu  
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<210> 23  
<211> 13  
<212> PRT  
<213> Rana temporaria

<400> 23  
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<210> 24  
<211> 12  
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<400> 24  
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1 5 10

<210> 25  
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<400> 25  
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<210> 26  
<211> 13  
<212> PRT

<213> Rana temporaria

<400> 26

Phe Val Gln Trp Phe Ser Lys Phe Leu Gly Arg Ile Leu  
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<210> 27

<211> 99

<212> DNA

<213> Phyllomedusa bicolor

<220>

<221> CDS

<222> (1)..(99)

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1 5 10 15

cat gca ggg aag gcc gcg ctt gga gca gta gcc gac acc atc tcg cag 96  
His Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln  
20 25 30

taa 99

<210> 28

<211> 32

<212> PRT

<213> Phyllomedusa bicolor

<400> 28

Met Ala Met Trp Lys Asp Val Leu Lys Lys Ile Gly Thr Val Ala Leu  
1 5 10 15

His Ala Gly Lys Ala Ala Leu Gly Ala Val Ala Asp Thr Ile Ser Gln  
20 25 30

<210> 29

<211> 57

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:PCR primer

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<210> 30

<211> 63

<212> DNA



<213> Artificial Sequence

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<223> Description of Artificial Sequence:PCR primer

<400> 30

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63

<210> 31

<211> 31

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 31

tctagaggta ccatggccat gtggaaagac g

31

<210> 32

<211> 38

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:PCR primer

<400> 32

caagcttctg cagagctctt actgcgagat ggtgtcgg

38

<210> 33

<211> 60

<212> DNA

<213> Rana temporaria

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<221> CDS

<222> (1)..(57)

<400> 33

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5

10

15

gga atc ctg taa

60

Gly Ile Leu

<210> 34

<211> 19

<212> PRT

<213> Rana temporaria

<400> 34  
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 1 5 10 15

Gly Ile Leu

<210> 35  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 35  
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<210> 36  
 <211> 45  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 36  
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<210> 37  
 <211> 30  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 37  
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<210> 38  
 <211> 29  
 <212> DNA  
 <213> Artificial Sequence

<220>  
 <223> Description of Artificial Sequence:PCR primer

<400> 38  
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<210> 39  
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<213> *Phyllomedusa bicolor*

<400> 39  
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<210> 40  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:spacer sequence

<400> 40  
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<210> 41  
<211> 4  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:spacer sequence

<400> 41  
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